Workshop on Renewable Energy Certificate (REC) Markets and Challenges

Panel #1: Discussion Panel on REC Markets, Prices, Trading, and Liquidity

Moderator, Karlynn Cory, National Renewable Energy Laboratory Brent Beerley, IBERDROLA – Marketer Perspective Carrie Cullen-Hitt, Constellation NewEnergy – Retailer Perspective Carrie Plemons, PPM Energy – Generator Perspective

John Pappas, PG&E – Purchaser Perspective

Jim Scarrow, Chadbourne & Parke – Financier Perspective

- Where do RECs have the greatest value today? What factors drive differences in value? Do you expect this to change over time?
- How important are prospective REC revenue streams to project finance decisions? How certain are these revenue streams? What are the key market risks? How can REC revenues play a greater role in project finance? What governmental actions, at the state or federal level, might facilitate this?
- From your perspective, would the market benefit from increased REC price transparency and/or from the development of forward REC price curves? If so, how might this be accomplished?
- From your perspective, would the market benefit from increased consistency in the definition and trading of RECs? If so, what elements of REC definitions are most critical (e.g., banking periods, treatment of emissions allowances, deliverability, resource eligibility)? Should the federal government seek to have one single REC tracking system that operates nationwide?
- We've heard a lot about how the different state rules for RPS eligibility and implementation, as well as the risk of policy changes, create uncertainty regarding long-term RECs prices and thus the ability to ascribe a value to RECs in project finance decisions. Do you view this as a problem, and if so, what changes would provide for greater market stability?
- How do you see the current regional or national RECs supply and demand balance? What is the outlook for new renewable energy supplies? How do you view competing market demands for RECs, e.g., from RPS policies, voluntary purchase markets, and carbon offsets?
- Overall, it appears that the credit markets might be experiencing some tightening, due to the housing market. Will this impact debt and/or equity financing of renewables?

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Panel #2: Discussion Panel on RPS Policies and Supporting Infrastructure

Moderator, Ryan Wiser, Lawrence Berkeley National Laboratory

Paul Douglas, California Public Utilities Commission Paul Helgeson, Wisconsin Public Service Commission Rick Morgan, District of Columbia Public Service Commission Mike Winka, New Jersey Board of Public Utilities Devon Walton, APX Jeff Bladen, PJM-EIS

- Each state has developed its own approaches to establishing its renewable policies (RPS policy, voluntary market, etc.), and many design differences are therefore apparent across states. To what extent has this been a concern expressed in your state? What is the nature of the concerns that have been expressed?
- It is (theoretically) possible that state RPS designs might become more uniform or harmonized over time, either nationally or regionally. Of the following design elements, which do you think are the most important to seek consistency on, and why?
 - o Resource eligibility rules
 - o Geographic eligibility rules
 - o Treatment of emissions allowances in RECs
 - o REC banking/settlement periods
 - o Other?
- How plausible do you think it is to gain additional standardization on any of these matters, and what processes may yield such harmonization? What are the substantive risks to further harmonization?
- To what extent do existing or in-development state and/or regional RECs tracking systems help with RPS compliance? Do you see any limitations in the way in which these systems are currently being designed? What reciprocity arrangements exist between tracking systems, if any, and are discussions underway to encourage more reciprocity? What moves are underway to fill market "holes" where REC tracking systems do not yet exist, and is there a role for the federal government to ensure that these holes are filled? Should the US be seeking a national solution to RECs tracking, rather than a region-by-region solution, and should certain regions (the Northeast) combine their tracking systems?
- Have there been any tensions between the goals of your RPS policy, e.g., supporting in-state
 renewables development and job creation versus low-cost electricity, and given that tension
 how has your state handled the eligibility of out-of-state resources and RECs? Have there
 been discussions of treating out-of-state resources/ RECs differently than you presently do?
- How do you view the potential impacts of a national RPS on the operation state RPS policies? What elements of this interaction are most critical?
- Given all of the previous discussion, are there any specific activities not otherwise discussed that DOE could help with?